

ATTACHMENT B

Amendments to the Claims

This listing of claims will replace all prior versions, and listing, of claims in the application.

1-31. (Canceled)

32. (Currently Amended) A method of synchronizing a plurality of local clocks of a plurality of USB devices, a each local clock corresponding to of each one of a plurality of USB devices, including respective local clocks, the plurality of USB devices being connected to a common USB host via a USB tree so that the said plurality of local clocks of the said plurality of USB devices are in phase and at a common frequency, comprising:

(a) locking the said plurality of local clocks comprising:

generating or designating specific signal structures for transmission to the plurality of USB devices in USB data traffic;
transmitting to each of said plurality of USB devices at least one of said specific signal structures to said USB devices in a predefined sequence;
monitoring local USB signals local to at each of said plurality of USB devices for said specific signal structures;

generating a plurality of local reference signals, each local
reference signal corresponding to each respective one of at each of said plurality of USB devices, from said specific signal structures received at each of said plurality of USB devices; and

locking the frequency a plurality of frequencies of said plurality of
local clocks, each frequency corresponding to a respective one of said plurality of local
clocks, at each of said USB devices to said local reference signal and each frequency
being locked to each corresponding one of said plurality of local reference signals to a
predetermined degree;

(b) determining the relative propagation time of signals from said USB
host to each of said USB devices with respect to a reference USB device selected from

said USB devices, comprising:

_____ (i) designating a master USB device in said USB tree for monitoring traffic on said USB data traffic to and from each of said plurality of USB devices;

_____ (ii) generating or designating specified signal structures for transmission to said plurality of USB devices in USB data traffic;

_____ (iii) transmitting said specified signal structures to each of said plurality of USB devices in a predefined sequence;

_____ (iv) monitoring said traffic on said USB data traffic with said master USB device for said specified signal structures and for specified response signals from said plurality of USB devices;

_____ (v) generating first event triggering signals local to said master USB device corresponding to decoding of said specified signal structures;

_____ (vi) generating second event triggering signals local to said master USB device corresponding to decoding of response signals from each of said plurality of USB devices;

_____ (vii) measuring respective time intervals between said first and second event triggering signals in said master USB device for said plurality of USB devices, each time interval corresponding to each one of said plurality of USB devices;

_____ (viii) determining a plurality of propagation times, each propagation time from said master USB device to each one of said plurality of USB devices being determined from said time interval corresponding to each one of said plurality of USB devices from said respective time intervals; and

_____ (ix) determining a plurality of relative propagation times, each relative propagation time corresponding to for each one of said plurality of USB devices other than said a reference USB device selected from said plurality of USB devices, each relative propagation time being determined with respect to said reference USB device by determining a difference in between the propagation time of said reference USB device said the propagation time of each corresponding one of said plurality of between said reference USB device and each of said USB devices other than said reference USB device;

_____ (c) determining what if any whether a temporal adjustment or phase offset

is required for each of said local clocks of said plurality of local clocks to result in said plurality of local clocks across said USB tree being in phase;

(d) for each local clock requiring a respective temporal adjustment or phase offset, transmitting each said respective temporal adjustment or phase offset from said USB host to the respective each corresponding USB device of said plurality of USB devices; and

(e) adjusting the phase of each local clock requiring a temporal adjustment or phase offset on the corresponding USB device said local clock on each of said USB devices according to said respective temporal adjustment or phase offset.

33. (Original) A method as claimed in claim 32, wherein at least some of said local clocks each of the local clocks of at least some of said USB devices are shifted in phase by a desired amount.

34. (Currently Amended) A method for synchronously triggering and thereby initiating or stopping one or more processes ~~on a plurality of USB devices connected to a common USB host according to a predefined trigger command, comprising:~~

~~synchronizing a plurality of local clocks of each of said plurality of USB devices according to the method of claim 32;~~

~~transmitting a predetermined trigger request signal and a predetermined trigger command signal in the USB data traffic, indicative respectively of a trigger request and of said trigger command;~~

~~monitoring USB data traffic local to each of said plurality of USB devices for said a trigger request signal and for said a trigger command signal, indicative respectively of an initiating trigger request and of a trigger command;~~

~~sending an initiating transmitting said trigger request signal with said USB host to each of said plurality of USB devices to prepare said plurality of USB devices to each execute said initiating trigger request;~~

~~configuring said plurality of USB devices to respond to said initiating trigger request signal by configuring themselves to perform said one or more processes upon receipt of said trigger command signal;~~

~~configuring transmitting said trigger command signal with said USB host to issue said trigger command to each of said plurality of USB devices; and~~

~~decoding said trigger command from said trigger command signal with each of said plurality of USB devices and thereby;~~

~~configuring said plurality of USB devices to execute initiate or stop said one or more processes at a common time; and~~

~~whereby said one or more processes within said USB devices can be initiated or stopped upon receipt by said plurality of USB devices of said trigger command signal from said USB host.~~

35. (Currently Amended) A method as claimed in claim 34, wherein said trigger request signal comprises a USB packet signal structure, any of the command sequences sent to the plurality of USB devices, or any of the data sequences sent to the plurality of USB devices.

36. (Original) A method as claimed in claim 34, including transmitting said trigger request signal and said trigger command signal in a predetermined sequence.

37. (Currently Amended) A method as claimed in claim 34, wherein said trigger command signal comprises a USB packet signal structure, any of the command sequences sent to the plurality of USB devices, or any of the data sequences sent to the plurality of USB devices.

38. (Currently Amended) A method as claimed in claim 34, wherein each of said plurality of USB devices includes a local USB decoding device, said local USB decoding device comprising a microcontroller, a microprocessor, a field programmable gate array or any other element capable of decoding data structures within each of said USB devices.

39. (Currently Amended) A method according to claim 34, wherein said trigger request signal comprises OUT tokens, IN tokens, ACK tokens, NAK tokens, STALL tokens, PRE

tokens, SOF tokens, SETUP tokens, DATA0 tokens, DATA1 tokens, or programmable sequences other predetermined bit patterns in the USB data packets.

40. (Canceled)

41. (Previously Presented) A method according to claim 34, wherein said trigger command is encoded into said USB data traffic.

42-50. (Canceled)

51. (New) A method as claimed in claim 34, including configuring said plurality of USB devices to in concert initiate or stop said one or more processes.

52. (New) A method as claimed in claim 34, wherein said one or more processes are a plurality of processes and the method includes configuring each of said plurality of USB devices to initiate or stop one or more of said plurality of processes.

53. (New) A method as claimed in claim 34, wherein said one or more processes are a plurality of identical processes.

54. (New) A method as claimed in claim 34, wherein said one or more processes are a plurality of processes that includes at least two processes that are different.